Remarks

Claims 1-39 are pending in the above captioned application. Claims 10, 24, 27-29, 33-35, 38 and 39 are withdrawn from consideration. Claims 1-9, 11-23, 25, 26, 30-32, 36 and 37 have been rejected. Applicants hereby formally withdraw from consideration in the above captioned application the claims as to which the Examiner has made the restriction final.

For the below stated reasons, the Examiner's rejections of claims 1-9, 11-23, 25, 26, 30-32, 36 and 37 are improper and the Examiner is respectfully requested to withdraw the rejections of claims 1-9, 11-23, 25, 26, 30-32, 36 and 37 and allow claims 1-9, 11-23, 25, 26, 30-32, 36 and 37.

Claims 1-9 and 11-23 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner has taken the position that:

"said sensor signal" (claim 1, line 9) is not clear as to whether this limitation is referred to "a signal [sic no close quotes] as recited previously in line 5.

Applicants respectfully point out to the Examiner that there is no recitation in claim 1, line 9 of "said sensor signal." The recitation is that after detection, "upon the detection of at least one parameter," then "said sensor signals said circuit" The recited sensor is the above recited "a sensor for detecting."

The Examiner has also taken the position that:

the scope of claims 11-23 is not clear because the claims is [sic] directed to a vibration control system and the limitations of these claims is [sic] directed to a fabrication systems [sic], such as the phrase: "controls fabrication system" (claims 11 and 12, lines 2-3); and claim 13 the limitation: "said fabrication system is selected from the group consisting of," these limitations do not further limit the claimed structure as recited in the preamble of claim 1.

Applicants would like to respectfully point out that, while claim 1 is directed to a "vibration control system," that vibration control system is recited to be "for use with a fabricating system," i.e., the vibration occurring in the "fabricating system" is what is being controlled. The references to "fabricating system" in claims 11-23 are entirely

¹ The Office Action cover sheet d es not include claim 31 as still pending, but the §103 rejection in the body of the Office Action is as to claims 30-32 and claim 31 has not been withdrawn from consideration.

consistent with the recitation and not to be confused in any way with the recitations to the "vibration control system" and/or to the "actuator assembly" that is recited in claim 1 as part of the "vibration control system."

Applicants would also like to respectfully point out to the Examiner that the recitation "controls fabrication system" to which the Examiner refers does not appear in claims 11 or 12. Claims 11 and 12 recite that "the actuator assembly controls vibration of the fabricating system"

The above, including the apparent misunderstanding of the Examiner of the claim language, should also be sufficient to traverse the Examiner's comments that the claim recitations do not further limit recitations in the claims from which these claims are dependent.

The Examiner has also taken the position that:

also the preamble of claims 36-37 appears to be inconsistent with one recited in claims 1 and 25, therefore the scope of claims 36-37 is also not clear.

Applicants would like to respectfully point out to the Examiner that there is entirely no inconsistency between the recitations of claims 1 and 36 or 37. Claim 1 recites a "vibration control system for use with a fabricating system" and claims 36 and 37 recite a "fabricating system" comprising (in the case of claim 36 specifically) the same elements of the "vibration control system" as recited in claim 1. In other words, claim 1 is to the "vibration control system" for use in the fabricating system and claim 36 is to the fabricating system having the vibration control system.

For the above stated reasons, the Examiner's rejections of claims 1-9, 11-23 and also apparently claims 36 and 37,² are improper and the Examiner is respectfully requested to withdraw the rejections of claims 1-9, 11-23 and 36 and 37, and allow claims 1-9, 11-23 and 36 and 37.

Claims 1, 2, 4-9, 25-26, 30-32 and 36-37 are rejected under 35 U.S.C. §102(a) as being anticipated by so-called Applicants' prior art ("APA").

Assuming that the so-called APA is as broad in scope as the Examiner states, it is not anticipatory of claims 1, 2, 4-9, 25-26, 30-32 and 36-37. The apparatus shown in

² The specific rejection in paragraph 5 f the Office Action is that "Claims 1-9 and 11-23 are rejected under 35 U.S.C. §112, second paragraph"

FIG. 1A of the specification in the above captioned patent application, at least, does not disclose that the sensor is "for use with a fabricating system" or that it is sensing a "parameter of displacement of said fabricating system."

For the above stated reason, the Examiner's rejections of claims 1, 24, 25, and 31 are not proper and the Examiner is respectfully requested to withdraw the rejections of claims 1, 24, 25, and 31 and allow claims 1, 24, 25, and 31.

There are numerous other elements of the dependent claims 2, 4-9, 26, 30 and 32, that are not found in the simplified discussion of FIG. 1A's illustration of a basic "electroactive actuator assembly." Moreover, at a minimum, these claims are allowable under *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988) as dependent from an allowable claim.

Claims 36 is specifically to a fabricating system not disclosed in the so-called APA, and claim 37 contains elements not in the APA either, and also is allowable under *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

For the above stated reasons, the Examiner's rejection of claims 1, 2, 4-9, 25-26, 30-32 and 36-37 under 35 U.S.C. §102 (a) is not proper and the Examiner is respectfully requested to withdraw the rejections of claims 2, 4-9, 25-26, 30-32 and 36-37 and allow claims 2, 4-9, 25-26, 30-32 and 36-37.

Claims 1, 25-26, 30-32 and 36-37 are rejected under 35 U.S.C. §102(a) as being anticipated by JP 5-248489 to Takahashi, et al.

The Examiner has taken the position that: "Takahashi et al teach a vibration control system for use with a fabricating system"

The same reasons applicable above to the so-called APA are applicable to Takahashi et al., since, at least, according to the English translation of portions of the Takahashi et al. reference, element 3 is simply described as a "device placing bed."

For the above stated reasons, the Examiner's rejection of claims 1, 25, 26, 31 and 36 under 35 U.S.C. §102 (a) is not proper and the Examiner is respectfully requested to withdraw the rejections of claims 1, 25, 26, 31 and 36, and allow claims 1, 25, 26, 31 and 36.



In addition, the dependent claims contain numerous recitations not found in Takahashi, et al., and for that reason should be allowed, or at least allowed under *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

As an example, claim 30 recites a "support structure" and claim 32 recites a "gantry."

For the above stated reasons the Examiner's rejections of claims 1, 25-26, 30-32 and 36-37 are improper and the Examiner is respectfully requested to withdraw the rejections of claims 1, 25-26, 30-32 and 36-37 and allow claims 1, 25-26, 30-32 and 36-37.

Claims 3, 10, 11-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Applicants' prior art in view of U.S. Patent No. 5,458,222, entitled ACTIVE CONTROL OF STRUCTURES UNDERGOING BENDING VIBRATIONS, issued to Pla et al. on October 17, 1995, based upon a U.S. application Ser. No. 349,588, filed on December 5, 1994 ("Pla").

The Examiner has taken the position that:

APA does not teach the use regarding at least two actuators. Pla et al. disclose this concept (see Fig. 1, shows at least two actuators plates being used 22).

For the reasons discussed above, the Examiner has failed to make a prima facie case of obviousness as to claims 3, 10 and 11-23. The so-called APA and Takahashi do not show the features noted above rendering those references non-anticipating, which make the combination of those references with Pla fail to contain all of the elements of the claimed invention.

Whether or not the Examiner has established *prima facie* obviousness allocates the burden of going forward with the evidence during the examination process.³ Initially the burden of going forward is on the Examiner to establish *prima facie* obviousness otherwise the applicant has no obligation to submit evidence of nonobviousness.⁴ For *prima facie* obviousness all of the claim limitations must be taught or suggested by the

³ M.P.E.P. §2142. See In re Rinehart, 531 F.2d 1048, 189 U.S.P.Q. 143 (C.C.P.A. 1976); In re Linter, 458 F.2d 1013, 173 U.S.P.Q. 560 (C.C.P.A. 1972); In re Saunders, 444 F.2d 599, 170 U.S.P.Q. 213 (C.C.P.A. 1971); In re Tiffin, 443 F.2d 394, 170 U.S.P.Q. 88 (C.C.P.A. 1971), amended, 448 F.2d 791, 171 U.S.P.Q. 294 (C.C.P.A. 1971); In re Warner, 379 F.2d 1011, 154 U.S.P.Q. 173 (C.C.P.A. 1967), cert. denied, 389 U.S. 1057 (1968).

⁴ M.P.E.P. §2142.

prior art.⁵ If an independent claim is nonobvious any claim depending from the independent claim is also nonobvious.⁶

Moreover, claims 10-23 do not even contain the recitation of "at least two actuators," found in claim 3, so the Pla reference is inapplicable to these claims.

Further, claims 10-23 contain other recitations not found in the APA or Takahashi, as noted above.

The Examiner has taken the position that as to claims 11 and 12 it is "inherent" from the APA "that the actuator assembly ... controls the fabrication system in order to increasing [sic] the accuracy during it [sic] operation."

The Examiner must support a rejection in the record with something more than a bald statement of "inherency."⁷

The Examiner has taken a similar position with respect to claims 13-18, i.e., that "it is conventional and well known in the art as to provide the vibration control system by attaching or securing it to an associated intended structure including the fabricating system. As with the "inherency" assertion, the Examiner must support this rejection on the record. Not only has the Examiner failed to cite a reference wherein a vibration control system is used with a fabricating system, but also the recited specific kinds of fabricating systems and for the specific kinds of improvements to the fabricating system recited in the claims. The Examiner cannot simply find obviousness "ipsi dixit."

The same is true with respect to claims 19-23.

⁵ M.P.E.P. §2143.03. See *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974); *In re Wilson*, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970) (must consider all of the claim language).

⁶ M.P.B.P. §2143.03. See In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

⁷ In re Lee, 277 F.3d 1338, 1345, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002) (" 'deficiencies of the cited references cannot be remedied by the Board's general conclusions about what is "basic knowledge" or "common sense." 'The Board's findings must extend to all material facts and must be documented on the record, lest the "haze of so-called expertise" acquire insulation from accountability.") or In re Thrift, 298 F.3d 1357, 1362, 63 U.S.P.Q.2d 2002 (Fed. Cir. 2002) (finding of obviousness as to one claim was proper where references themselves suggested combination but that simple assertion that "[t]he use of grammar is old and well known in the art of speech recognition as a means of optimization which is highly desirable," did not make out a case of prima facie obviousness).

⁸ In re Lee, 277 F.3d 1338, 1345, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002); In re Thrift, 298 F.3d 1357, 1362, 63 U.S.P.Q.2d 2002 (Fed. Cir. 2002).

⁹ In re Lee, 277 F.3d 1338, 1345, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002); In re Thrift, 298 F.3d 1357, 1362, 63 U.S.P.Q.2d 2002 (Fed. Cir. 2002).

For the above stated reasons, the Examiner's rejection of claims 3, and 10-23 are improper and the Examiner is respectfully requested to withdraw the rejections of claims 3 and 10-23 under 35 U.S.C.§103(a) and allow claims 3 and 10-23.

Conclusions

The Examiner's rejections of claims 1-9, 11-23, 25, 26, 30-32, 36 and 37 are improper and the Examiner is respectfully requested to withdraw the rejections of claims 1-9, 11-23, 25, 26, 30-32, 36 and 37 and allow claims 1-9, 11-23, 25, 26, 30-32, 36 and 37.

Applicants do not believe that there are any charges or fees due respecting this response. However, if any are due, the Commission is hereby authorized to charge the Deposit Account of Cymer, Inc., Deposit Account No. 03-4060 for any such charges or fees.

Respectfully submitted,

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